Remarks

Paragraphs 0001, 0021 and 0026 of the specification have been amended.

Figures 3 and 4 have been amended.

Claims 12-13 are sought to be added. Claims 1-11 are sought to be amended. Upon entering this amendment, Claims 1-13 are pending in the application, with 1 and 6 being the independent claims.

No new matter has been entered by these amendments.

Reconsideration of this Application is respectfully requested.

Based on the above amendments and following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Amendments to the Specification

Paragraph 0001 has been amended to update the status of the priority application.

Paragraphs 0021 and 0026 were objected to by the Examiner. Applicants have amended the paragraphs as suggested by the Examiner. Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the objections.

Objections to the Drawings

Figures 3 and 4 were objected to for lead line and shading errors. Based on the amendments to Figures 3 and 4, Applicants respectfully request the Examiner reconsider and withdraw the objections.

Rejections under 35 U.S.C. §§ 102(b) and 103(a)

Claims 1-2, 4-7, and 9-11 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,339,441 to Kardos et al. ("Kardos"). Claims 3 and 8 were rejected to under 35 U.S.C. §103(a) as being upatentable over Kardos. Applicants assume the 35 U.S.C. §103(a) rejection further includes the Wikipedia references SKGF Ref. No. 1857.0870001

mentioned in the Office Action at pages 5 and 6. Applicants respectfully traverse these rejections.

Claims 1 and 6 have been amended to recited features that distinguish over the applied reference. For example, claims 1 and 6 now recite at least a CaF₂ cube or CaF₂ optical device, respectively, wherein the CaF₂ cube or CaF₂ optical element transmits deep ultra violet or vacuum ultra violet wavelengths of light substantially without absorption.

Kardos teaches forming an ultraviolet polarizing device that functions at 308 nm through coupling of first and second pieces of glass made from fused silica or another low index glass of high quality bulk material. In contrast, claims 1 and 6 now recite a CaF₂ cube or CaF₂ optical device, respectively, wherein the CaF₂ cube or CaF₂ optical element transmits deep ultra violet or vacuum ultra violet wavelengths of light substantially without absorption. Applicants assert the use of CaF₂ crystal is not anticipated nor rendered obvious in view of the glass taught in Kardos because working with CaF₂ crystal is substantially more difficult than working with glass. Thus, it is a non-trivial innovation to develop a cube or optical element structure using CaF₂ crystal compared to using glass. Also, the glass materials taught by Kardos absorb DUV or EUV wavelengths. Thus, Kardos does not teach or suggest at least wherein the CaF₂ cube or CaF₂ optical element transmits deep ultra violet or vacuum ultra violet wavelengths of light substantially without absorption, as now recited in claims 1 and 6.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1 and 6. Also, at least based on their respective dependencies from claims 1 and 6, claims 2-5 and 7-13 should be found allowable over the applied reference.

The dependent claims also contain features which further distinguish over the applied reference. For example, claims 12 and 13 recite, respectively, wherein the wavelength of light is about 157 nm, which is transmitted through the CaF₂ cube/CaF₂ optical device substantially without absorption, which is not taught or suggested by the applied reference.

In regards to claims 3 and 8, Applicants object to the use of the Wikipedia references because their only known date, the date of printing, post-dates the effective

filing date of the instant application. Therefore, the Wikipedia references cannot be applied against the instant application. In view of this, it appears the Examiner has taken what amounts to Official Notice for the rejection of claims 3 and 8. However, in regards to the rejection of claims 3 and 8, Applicants disagree with the allegations made by the Examiner. Therefore, Applicants request, pursuant to M.P.E.P. 2144.03(C), that the Examiner produce documentary evidence of the now unsupported allegation.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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